UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,535	12/13/2005	Tsuyoshi Aoyama	713128.30	6460
27128 7590 04/02/2007 BLACKWELL SANDERS PEPER MARTIN LLP 720 OLIVE STREET SUITE 2400 ST. LOUIS, MO 63101			EXAMINER	
			TOLAN, EDWARD THOMAS	
			ART UNIT	PAPER NUMBER
,			3725	
			· · · · · · · · · · · · · · · · · · ·	
SHORTENED STATUTORY P	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONT	THS	04/02/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

•	Application No.	Applicant(s)				
Office Assistant Communication	10/560,535	AOYAMA, TSUYOSHI				
Office Action Summary	Examiner	Art Unit				
	Edward Tolan	3725				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	I, nely filed the mailing date of this communication. D. (35.U.S.C. 8.133)				
Status						
1) Responsive to communication(s) filed on						
_						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-8</u> is/are pending in the application.	Claim(s) 1-8 is/are pending in the application					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4 and 7</u> is/are rejected.						
7)⊠ Claim(s) <u>5,6 and 8</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) ☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>13 December 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da					
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	5)	atent Application.				
	· — —					

Application/Control Number: 10/560,535

Art Unit: 3725

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuzuki (5,307,662) in view of Ragettli (4,909,056). Tsuzuki discloses a rolling machine and method comprising a rotatably driven container (2) into which a cylindrical work (w) is placed for forming threaded teeth therein. A base (1,7) supports the container through rollers (8) and bearings (13,14). A rolling tool (3) has external teeth (31) and is pressed against an inner side of the work to fabricate the threaded profile. A rolling tool rotational shaft (27) rotatably drives the rolling tool (3). A transfer mechanism (5,28) moves the rolling tool rotational shaft to forcibly change a distance between a rotational axis of the container and a rotational axis of the shaft (column 4, lines 43-49 and column 5, lines 3-8). Tsuzuki discloses a vertical shaft (11) for toughly keeping a position of the container (column 3, lines 43-48). Regarding claim 7, the shaft must be disengaged for removal of the product. Tsuzuki does not disclose that the container has radial bearings. Ragettli teaches that it is known to support a container (9) through bearings (8) for rotation. It would have been obvious to one skilled in the art at the time of invention to substitute the container bearings of Ragettli for the turntable rollers (8) of Tsuzuki in order to process annular workpieces without end blank material.

Application/Control Number: 10/560,535

Art Unit: 3725

Page 3

The Examiner's position is that when processing annular workpieces (such as Ragettli) without the material needing to be pinned by the means (9) of Tsuzuki it would have been obvious to provide the container/turntable interface with well known rotating bearings as taught by Ragettli since the bearings in a packed housing are more stable than the rollers (8) as far as a supporting means.

## Allowable Subject Matter

Claims 5,6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525. FAX communications should be sent to 571-273-8300.

ED IOLAN MB<del>Y EX</del>AMINER